

Appl. No. 10/727,907
Amdt. dated December 4, 2006
Reply to Office Action of September 7, 2006

Docket No. A01327

AMENDMENTS TO CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (previously presented) A coating composition comprising a multi-stage emulsion polymer that is both radiation curable and removable and includes carboxylic functional groups in the coating that react with one or more chemical stripping agents, effecting the removal of the coating from a substrate,
wherein the shell of said multi-stage emulsion polymer comprises a carboxylic acid-containing emulsion polymer that comprises, as polymerized units, one or more comonomers having carboxylic acid functionality,
wherein said multistage emulsion polymer further comprises 5 to 80 percent, based on equivalents of acid groups, polyvalent metal ion.
2. (canceled)
3. (original) The coating of claim 1 wherein the UV curable, removable composition is included within one or more layers applied on top of a substrate.
4. (original) The coating of claim 1 wherein the UV curable, removable composition is included within one or more layers applied on top of a base coat, the base coat disposed on top of a substrate.
5. (original) The coating of claim 3 or claim 4 wherein the substrate refers to any surface that is vertical, horizontal or inclined upon which the coating is applied and is selected from the group consisting of flooring, wall, ceiling, tile materials, vinyl floor tiles, tiles coated with sealer or primer, ceramic tiles, wood, metal, concrete, marble, slate and simulated natural stone.

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6. - 10 (cancelled)

11. (previously presented) The coating composition of claim 1, wherein said comonomers having carboxylic functionality are selected from the group consisting of acrylic acid, methacrylic acid, itaconic acid, fumaric acid, citraconic acid, and mixtures thereof.
12. (previously presented) The coating composition of claim 11, wherein said comonomers having carboxylic functionality are selected from the group consisting of acrylic acid, methacrylic acid, and mixtures thereof.
13. (previously presented) The coating composition of claim 1 wherein said multi-stage emulsion polymer further comprises a highly crosslinked core, and wherein said shell is reacted with a multifunctional monomer to provide a post functionalized shell having residual ethylenically unsaturated groups.
14. (previously presented) The coating composition of claim 13, wherein said multifunctional monomer is selected from the group consisting of monoethylenically unsaturated monoepoxides, monoethylenically unsaturated amines, monoethylenically unsaturated diamines, monoethylenically unsaturated alcohols, and monoethylenically unsaturated polyols.
15. (previously presented) The coating composition of claim 14, wherein said multifunctional monomer is selected from the group consisting of monoethylenically unsaturated monoepoxides.
16. (previously presented) The coating composition of claim 15, wherein said multifunctional monomer is glycidyl methacrylate.

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17. (previously presented) The coating composition of claim 1, wherein said polyvalent metal ion is one or more polyvalent metal ion selected from the group consisting of zinc, calcium, magnesium, and zirconium.
18. (previously presented) The coating composition of claim 1, wherein the amount of said polyvalent metal ion is 20 to 75 percent, based on equivalents of acid groups on said multi-stage emulsion polymer.
19. (previously presented) The coating composition of claim 1,
wherein said multi-stage emulsion polymer further comprises a highly crosslinked core,
wherein said shell is reacted with a multifunctional monomer to provide a post functionalized shell having residual ethylenically unsaturated groups,
wherein said multifunctional monomer is selected from the group consisting of monoethylenically unsaturated monoepoxides, monoethylenically unsaturated amines, monoethylenically unsaturated diamines, monoethylenically unsaturated alcohols, and monoethylenically unsaturated polyols, and
wherein said polyvalent metal ion is one or more polyvalent metal ion selected from the group consisting of zinc, calcium, magnesium, and zirconium.
20. (previously presented) The coating composition of claim 1, wherein said chemical stripping agent comprises ammonia or an amine.